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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,788	11/14/2001	Bruce M. Russell	IR 6555-00	5839

23909 7590 01/23/2006

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EXAMINER	
BALSIS, SHAY L	

ART UNIT	PAPER NUMBER
1744	

DATE MAILED: 01/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/992,788	RUSSELL ET AL.	
	Examiner	Art Unit	
	Shay L. Balsis	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 November 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,7,9 and 10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7,9 and 10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 August 2004* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brice (USPN 5499421).

Brice teaches a toothbrush manufactured from three preformed components (5, 6, 4a), which are welded together to form a toothbrush (col. 7, lines 1-21). The preformed components are a neck and a two brush heads. Brice teaches that the "heads may flex in any single direction or combination of different directions...The degree of flexure of each neck portion segment can be easily controlled by for example, increasing or decreasing the length of the neck portion...or using different material" (col. 9, lines 51-59). Brice therefore, teaches that the since the components may be made using different material, it is clear that the components would have a different melt flow rate from each other.

Brice discloses the claimed invention except for making one of the components from an elastomeric material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make one of the components from an elastomer, since it has been held within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering choice. *In re Leshin, 125 USPQ 416.* Additionally, an elastomeric material would assist the flexibility of the toothbrush with the forces incurred when brushing.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brice in view of Gartland et al. (USPN 6682620).

Brice teaches all the essential elements of the claimed invention, including that the handles, neck and heads are made from conventional polymers, however fails to teach a specific break strength of the weld. Gartland teaches a method of welding thermoset plastic monofilament fabric to provide a continuous method of treating the monofilament fabric. Gartland teaches that the thermoset plastic monofilament fabric have a weld strength of 465 lbs/in (col. 8, lines 45-50). Since Gartland is welding plastic monofilament fibers together and creating a strong weld strength, it would have been obvious to one of ordinary skill in the art at the time the invention was made that break strength of Brice's weld is at least at least 465 lbs/in, if not stronger since Brice is welding solid plastic/elastomeric components instead of fibers.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brice (USPN 5499421) in view of Dow.com.

Brice teaches all the essential elements of the claimed invention as stated above however fails to teach that the components made with different materials have melt flow rates which differ by more than 5g/10min. Brice teaches using conventional polymers to form the toothbrush components. Dow.com teaches many conventional polymers such as polypropylene which all have various melt flow rates.

Therefore, since the Applicant does not state what materials are used, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make one of the components from polypropylene (C702-20) with a melt flow rate of 18.0g/10min and another component from polypropylene (C700-35) with a melt flow rate of 35.0g/10min since it has been held within the general skill of a worker in the art to select a known material on the basis of its

suitability for the intended use as a matter of obvious engineering choice. *In re Leshin, 125 USPQ 416.*

Additionally, because the Applicant has not disclosed that the materials used for the components provides an advantage, is used for a particular purpose, or solves a stated problem, one of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with any of the polypropylene material as discloses on Dow.com because a majority of them all have melt flow rates which differ by more than 5g/10min.

Response to Arguments

Applicant stated that the Examiner did not examine claims 26-32, and that any future Office Action on the merits should be deemed non-final. However, according to the RCE filed 7/15/05, it is clearly stated that the claims to be examined are the ones in the after final amendment filed June 20, 2005. That after final amendment does not include claims 26-32. Claims 26-32 were included in the after final amendment dated 5/23/05. Therefore, Applicant is incorrect in stating that the Examiner fails to address claims 26-32, since those claims are not pending.

Applicant's arguments, see pages 5-6, filed 11/22/05, with respect to Kramer have been fully considered and are persuasive. The rejections of Kramer have been withdrawn, since Kramer does not teach that the weld between the two preformed components is made from the material of the components or that either of the components is elastomeric.

Applicant's arguments filed 11/22/05, with respect to Brice have been fully considered but they are not persuasive. Applicant states that Brice teaches only using ultrasonic or vibration welding. Referring to column 11, lines 34-57, it is noted the Brice clearly states that the "two segments are then bonded using a conventional bonding equipment, such as magnetic vibration

welding or ultrasonic vibration welding." The reference does not state that *only* ultrasonic or vibration energy is used but any type of conventional bonding equipment could be used. Therefore, a conventional means for bonding an elastomeric material could have been used.

With regards to the arguments of different flow rates, Brice clearly teaches using two different materials for the components. Brice however fails to teach what the materials are. It is known that Brice uses conventional polymers to form the components, and therefore, two different conventional polymers would be used since Brice teaches that the components could be made from different materials. Therefore, since it is known that two conventional polymers would be used, it is obvious to go to a teaching of conventional polymers to determine melt flow rates. There is motivation to find two different polymers since Brice teaches that two different polymers are used. Dow was used solely to show the melt flow rates of different polymers.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Balsis whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Slb
1/17/06

RICHARD CRISPINO
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